## Knowledge shared = Knowledge<sup>2</sup>



## Chit Chat Discussion Sheet

## Dr. Nathaniel Swain – Science of Learning

Welcome to the Chit Chat between Carla McNeil of Learning MATTERS, and Dr. Nathaniel Swain. During this Chit Chat, Carla and Nathaniel discuss the science of learning, including cognitive load theory, the principles of review, rehearsal, and retrieval, effective practice types and included some top teaching tips.

We encourage you to listen to the Chit Chat (44 minutes) with your colleagues, team and/or staff, and consider the following questions and discussion points along the way. We hope this helps to cause some robust conversations, build shared understandings and offers an opportunity for reflection.

You may wish to use the strategy of **READ** (this discussion doc)  $\rightarrow$  **LISTEN** (listen to the Chit Chat)  $\rightarrow$  **CHAT** (with your colleagues), sharing your thoughts, learnings and reflections.

- What is the Science of Learning?
- What are the 4 key principles of the Science of Learning that Nathaniel shares with us?
- What is intrinsic and extraneous load?
- When considering extraneous load, what environmental factors might we consider?
- When we consider memory storage, what does Nathaniel share with us in relation to capacity in working memory as opposed to long term memory?
- What is the difference between information and outformation?
- Consider what Nathaniel discussed about review, rehearsal and retrieval.
- Consider how you currently include review and retrieval in your lesson sequences.
- Consider how you currently release content to students. Is there a need to modify how you do this?
- What is the relationship between Structured Literacy and the Science of Learning?

We hope you found the Chit Chat thought–provoking and a good opportunity to reflect on your practice. Perhaps you have begun your journey into Structured Literacy and the Science of Reading and there was a lot of affirmation, or perhaps this is your starting point. Either way, you are on your way. We wish you all the best as you too work to make a greater evidence-based shift in your setting.

- Do you have more to learn? What will you do now? What do you think are the next steps for your school?
  - o Build more knowledge?
  - o Improve teaching practice?
  - o Consider resourcing?
  - o Build consistency across classrooms?

